

## Meeting Summary:

### Regulatory Advisory Panel:

Unused Nutrient Allocations in the Shenandoah-Potomac River Basin

Nov. 4, 2009, 1:30 PM – 3:30 PM, DEQ Northern Regional Office

1. Members present:

Name	Representing
1. Alan Pollock	DEQ-OWQP, RAP Chairman
2. Mike Gerel	Chesapeake Bay Foundation
3. Mark Haley	VA Nutrient Credit Exchange Association
4. Evelyn Mahieu	Upper Occoquan Service Authority
5. Jeanette Irby	Town of Leesburg; Town Attorney
6. Rodney McClain	Shenandoah County
7. Keith Lane	Town of Round Hill; consulting engineer from Peed & Bortz Engrs.
8. Kevin Rose*	JP Salyards, Transportation LLC; legal counsel from Botkin Rose PLC
<b>State Resource Staff</b>	
9. John Kennedy	DEQ-CBP, Staff Lead
10. Allan Brockenbrough	DEQ-CO Water Permits
11. Bryant Thomas	DEQ-NRO Water Permits
12. R. Keith Fowler	DEQ-VRO Water Permits

Note: \* Alternate for Joseph Salyards – JP Salyards, Transportation LLC

Members not attending:

- Barney Durrett – Fauquier Co. Water & Sewer Authority
- Normand Goulet – Northern Virginia Regional Commission

Others in attendance:

- John Barkley – Town of Round Hill
- Randy Shoemaker – Town of Leesburg
- Doug Frasier – DEQ-NRO VPDES Permit Writer

2. Prior to the meeting, RAP members were provided with:

- The draft agenda.
- SWCB Minute #2 (4/27/09 meeting), discussing amendments to Merck's nutrient waste load allocations (WLAs) and directions to conduct the subject rulemaking to identify "unused" WLA in the basin to offset the increase approved for Merck.
- A spreadsheet of potential WLA offsets in the Shenandoah-Potomac basin and known/pending needs for increased allocations (Merck and FCW&SA-Vint Hill).
- A spreadsheet of current discharged and "delivered" Shenandoah-Potomac nutrient loads in the Water Quality Management Planning (WQMP) Regulation.
- Summary of comments received on the Notice of Intended Regulatory Action (NOIRA).
- Slides for the RAP meeting presentation.
- Slides introducing the federal-state Chesapeake Bay TMDL development.

3. After welcoming the members and making introductions, the first agenda item was to summarize the 4/27/09 SWCB decisions that amended Merck's nutrient WLAs and initiated the subject "unused" allocation rulemaking. Two other pertinent activities were also explained:

- A pending rulemaking to increase the nitrogen WLA for Fauquier Co. Water & Sewer Authority-Vint Hill STP (being temporarily suspended until the "unused" allocation rulemaking yields information needed for decision making).

- The Board's 10/27/09 action on petitions to extend the deadline for plants receiving conditionally increased nutrient WLAs, required to have a Certificate to Operate for the expanded design capacity by 12/31/10. Three of the seven petitioners are now constructing their expansions and were approved for 1-year extensions; four others not under construction were denied.
4. Next, the RAP discussed the spreadsheet of nutrient WLAs in the WQMP Regulation for the Shenandoah-Potomac. Nine existing "footnoted" allocations were noted (conditioned on plant expansion by 12/31/10), and explanations were given for ten other dischargers that have WLAs based on higher design flow, but not "footnoted" with a Certificate to Operate (CTO) deadline. Of these ten:
- Eight are Water Quality Improvement Fund grant projects either completed, well into construction, or construction is imminent.
  - Two are not under construction (Leesburg and Round Hill) and the schedule is uncertain. This is the reason these plants were identified as potential sources of "unused" allocations.
  - Leesburg representatives noted that at the time the Town negotiated with the Office of the Secretary of Natural Resources for an increased WLA (based on 10 MGD; current plant is 7.5 MGD), it was without a commitment to secure the CTO by 12/31/10.
  - The RAP also heard explanations for several plants in the WLA listing, regarding their potential to yield "unused" allocations:
    - JP Salyards (formerly Pilgrims Pride-Alma) – original basis for WLAs was poultry processing discharge that is now inactive; no specific application for new operation (metal recycling) needing nutrient WLAs. In comments to the RAP Chair prior to the meeting, Salyards' position is that the WLA is now being marketed to other dischargers and State action to rescind the WLA would be a "taking without compensation".
    - Shenandoah Co.-North Fork Regional STP (formerly Aileen Inc.) – possible source for "unused" WLA because basis for original allocations was an industrial discharger no longer operating. County bought treatment plant to form regional wastewater facility; no longer viable due to construction of new Mount Jackson STP. Plant has no sewer collection system and is being used to treat landfill leachate and septage hauled to the site (current "Permitted Design Capacity" based on 0.1 MGD). In comments to the RAP Chair prior to the meeting, Shenandoah County said it is unknown when and how much of the existing WLA (based on 0.75 MGD) will be needed.
    - Town of Leesburg – WLA based on 10 MGD; current plant is 7.5 MGD. Although not "footnoted", expansion not expected until after 2010. In comments to the RAP Chair prior to the meeting, the Town needs the increased WLA to provide for discharge compliance after December 2010. Expect to begin upgrade/expansion design in 2015. Rescinding the higher WLA would cause short-term cost increase due to accelerated ENR upgrade and need to purchase compliance credits. Long-term impact would be additional debt service and increased O&M costs.
    - Upper Occoquan Service Authority – candidate for "unused" allocations because need for nitrate discharge level to protect quality of drinking water reservoir may not be as high as the original basis for WLA. Recent data from 2007-2008 showed plant discharged well under the nitrogen WLA, with DEQ unaware of any negative impacts on receiving water quality. In comments to the RAP Chair prior to the meeting, UOSA cited studies by the Occoquan Watershed Monitoring Lab (OWML) showing nitrate deficiencies in the reservoir, which apparently caused release of ammonia and phosphorus from sediments that impacted dissolved oxygen levels. Lowering the nitrogen WLA

would negatively impact water quality, current plant design and long-term planning, and jeopardize meeting WLA in future years.

- Town of Round Hill – candidate for “unused” allocations because existing plant is 0.5 MGD (not “footnoted”) while WLA is based on 0.75 MGD and expansion not expected until after 12/31/10. In comments to the RAP Chair prior to the meeting, the Town intends to upgrade and expand facility by 12/31/10 and is under a consent decree to provide treatment capacity to a developer.
- RAP members representing the plants being examined as possible sources of “unused” allocations were then invited to give further explanation of their status, plans and positions.
  - JP Salyard (Kevin Rose, Salyard’s legal counsel) – Situation appears similar to Shenandoah Co.-North Fork; both acquired inactive industrial discharges, intending to “bank” the WLA and market the credits. The original prospect for a joint project with Page County for the site fell through, but engineer is still seeking a buyer for the WLA. The uncertainty created by this rulemaking has driven the demand down. Salyard did not intend originally to market this WLA to another poultry producer, but could consider that option; Hinton Poultry Cooperative is an example of this.

From a legal standpoint, it would be wrong to deny Mr. Salyard the use of the WLA since that was the assumption he had when purchasing the site. It appears politics is driving this rulemaking to accommodate Merck at the least-or no-cost. Mr. Salyard has a substantial investment in the facility and intends to “put up a fight” to hold on to the WLA.

In response to these comments, the RAP Chair explained that the Nutrient Credit Exchange Law deals with new dischargers that get zero allocation when coming on-line, and it wasn’t the State’s intent to allow banking of allocations beyond any plant’s design flow for future needs. The WLAs aren’t caps on growth – they are caps on pollution. The SWCB isn’t favoring any one side in this rulemaking and they have the authority to amend the regulation. Mr. Rose’s client would have the opportunity to present his case to the Board before any final decision is made. Further, before the Board takes any action to amend a regulation the Attorney General’s Office must certify the Board’s authority to do so.

Mr. Rose stated that he’d rather see the AG’s determination sooner rather than later in this process. It was agreed that DEQ staff would explore the possibility of getting this review and determination before the rulemaking proceeds much further, and notify the RAP of the findings.

- Shenandoah Co.-North Fork (Rodney McClain) – The County only acquired the wastewater treatment plant at the old Aileen site, not the industrial production facility; when the industry closed the County lost its biggest employer. The industrial treatment plant was rated at 1.8 MGD based on production values; for municipal wastewater treatment the aeration capacity limits the design flow to 0.75 MGD. By purchasing the wastewater plant at a “fire sale” price, the County got a relatively new facility that could solve their solids processing needs (County has other small plants serving two sanitary districts) as well as landfill leachate treatment. When nutrient WLAs were adopted, Mount Jackson considered connecting to the North Fork plant but local citizen opposition to piping waste prevented the project and Mount Jackson opted for their own upgrade. The County plans to put a septage receiving station and pump station near the North Fork plant to encourage routine, periodic pump outs of the

~12,000 homes with on-site systems. The plant has 3 flow tiers in the VPDES permit: 0.1, 0.25 and 0.75 MGD. Regarding impact of the rulemaking on the County, they have joined the Nutrient Credit Exchange Association and anticipate renewed growth once the economy recovers, with the plant poised to become a regional solution to wastewater needs only if the WLA is preserved.

Based on the discussion and some follow-up questions about the County's future plans, DEQ staff understands that the County does not intend to make any changes at the plant to secure a CTO for the 0.75 MGD design flow by the 12/31/10 deadline; therefore, the County's WLA will automatically be deleted from the WQMP Regulation after 12/31/10. However, the nutrient discharge allowance for the North Fork STP will revert, per Virginia Code, to the permitted design capacity (PDC) certified for operation as of 7/1/05, which is 0.1 MGD. The PDC for the 0.1 MGD facility is: total nitrogen = 5,695 lbs/yr; total phosphorus = 761 lbs/yr.

- Town of Leesburg (Jeanette Irby, Town Attorney) – Rulemaking couldn't have come at a worse time for the Town. Leesburg has based long-term planning on the nutrient WLA. As noted earlier, OSNR's direction to set Leesburg's original WLA based on 10 MGD did not require a commitment to have the expansion complete by 12/31/10. Reiterated that the long-term impact would be additional debt service and increased O&M costs, and these cannot be covered due to court-ordered restrictions on user fees (result of out-of-Town customers' citizen suit). Town has an appeal pending before the State Supreme Court. Leesburg has to increase rates by 21% to cover existing costs for treatment and debt service. Phased-in operation of expanded design flow was planned; schedule has been extended due to lack of growth and better tolerance for increased fees over time. The lack of planning on Merck's part can be resolved with a combination of State assistance and increased prices passed along to consumers – Leesburg can't resolve this dilemma without an assured, higher WLA due to the impact on capital costs, O&M costs, debt service and disruption caused by accelerated plant upgrade.
- Upper Occoquan Service Authority (Evelyn Mahieu) – summarized decision criteria used to set the original nitrogen allocation, which essentially preserved the existing nitrate discharge to the reservoir, thus protecting drinking water quality for about 1 million residents. Described the study design used in the two-year test of the plant's denitrification system, which led to the reduced TN discharges in 2007-2008, averaging about 400,000 lbs/yr below the WLA. A one-year study was originally planned, but due to nitrate pumping and plant process stability problems the time was extended. Occoquan Watershed Monitoring Lab (OWML) detected a dissolved oxygen deficiency and increased ammonia and phosphorus concentrations in the lower layers of the reservoir during the study. OWML concluded that the D.O. deficiency caused the observed increases of these two algae nutrients, which in time may translate into algae blooms. When asked if another level of reduced TN discharge load would still protect water quality (i.e., not as far below the WLA as 400,000 lbs/yr), Ms. Mahieu suggested that Dr. Tom Grizzard at OWML be contacted to brief DEQ staff on this issue if additional discussion is desired.

DEQ staff noted that the water quality impact being avoided, by setting the WLA at a relatively high level, was algae blooms causing taste and odor problems – not depressed dissolved oxygen levels. Ms. Mahieu said she did not know if there were elevated algae levels, in addition to the depressed D.O. and increased ammonia and phosphorus concentrations. She suggested that Dr. Grizzard should be contacted to discuss this issue. DEQ-NRO staff

explained that the TMDL listing for the reservoir is based on depressed dissolved oxygen levels.

- Town of Round Hill (Keith Lane, Town consultant with Peed & Bortz Engrs.) – The Town has no choice but to provide service to a developer under a consent decree for both water and sewer. Much of the needed equipment that would allow the wastewater plant to be rated at 0.75 MGD is already in-place, such as the basin for a Sequencing Batch Reactor which only needs the equipment installed. Their schedule shows design completed by the end of November 2009, project out for bids by the end of the year, and construction completed to resolve all hydraulic needs and equipment installation by the end of 2010. This would include nutrient reduction technology to meet the WLAs.
5. A discussion followed among the members on the information provided by the five facility owners. Leesburg stated that they would have had the impetus to get the expanded design flow constructed and certified for operation if a regulatory deadline was included in a footnote for their plant. Ms. Irby asked if any other dischargers were in the same position as Leesburg (no footnote and not expected to secure CTO by 12/31/10). DEQ staff responded that in the list of Shenandoah-Potomac dischargers (which is the focus of the rulemaking), the Town of Round Hill was similarly situated; hence, their inclusion as a possible source of “unused” allocations. DEQ staff agreed to examine the other Chesapeake Bay watershed river basin WLA listings to see if any other plants were in a similar position.
6. Planning future actions and meetings – Chairman Pollock then described the next step in the rulemaking, which is to consider the information presented at this RAP meeting along with other comments on the NOIRA and form a staff recommendation for DEQ upper management to review. If it appears necessary, a follow-up RAP meeting will be scheduled, but in any event the RAP will be briefed on staff recommendations that may be brought to the State Water Control Board for their consideration before moving into the “Proposed Amendments” stage. The earliest that is likely to occur would be at the Board’s spring 2010 meeting.

DEQ staff agreed to provide a draft of the meeting minutes for RAP members’ review and comment as needed. The minutes and all other meeting materials will be posted and accessible to the RAP on the DEQ-Chesapeake Bay Program webpage (“Point Source Nutrient Discharge Control”), at this link: <http://www.deq.virginia.gov/bay/multi.html>.